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METHODS, SYSTEMS AND COMPUTER PROGRAM PRODUCTS FOR IDENTIFYING CONDITIONAL ASSOCIATIONS AMONG FEATURES IN SAMPLES

Abstract of the Disclosure

Conditional associations among features in samples are identified by defining a matrix having rows that represent the samples and columns that represent the features. Each row-column position of the matrix has a first binary value if the sample that is associated with the row exhibits the feature that is associated with the column, and a second binary value if a sample that is associated with the row does not exhibit the feature that is associated with the column. Recursive partitioning then is performed for each column. In particular, for each column, the column is recursively partitioned relative to the remaining ones of the columns, to define a tree of conditional branches for the rows for each column. The collection of trees of conditional branches for the columns may be displayed and/or analyzed to identify conditional associations of interest. Continuous features, wherein each row-column position of the matrix has a value selected from a continuous range of values, also may be analyzed.